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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,836	12/08/2003	Terry A. Todd	B-294	4419

7590 08/08/2006
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EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,836

Applicant(s)

TODD ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleys et al. US 6,034,149.

Regarding claim 1, Bleys '149 discloses an absorbent comprising dispersed acrylonitrile (see column 3, lines 47-51) and triallyl methylammonium chloride (see column 5, lines 52-55).

Regarding claim 8, Bleys '149 discloses combining in solution (see Examples) dispersed acrylonitrile (see column 3, lines 47-51) and triallyl methylammonium chloride (see column 5, lines 52-55), mixing with water (see Example 1), and producing a dry foam (see column 7, lines 30-40).

With respect to claims 1 and 8, Bleys fails to disclose that the dispersion is homogenous.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to disperse homogenously because an ordinary artisan would maximize the dispersal of the acrylonitrile as disclosed to achieve homogeneity.

Regarding claims 2-4, 9-11, and 17, Bleys '149 discloses triallyl methylammonium chloride crosslinker (see column 5, lines 52-55) and up to 5-10 per 100 parts per weight crosslinker (see column 4, lines 10-28), which would suggest up to 90-95 parts acrylonitrile.

Regarding claims 5 and 13, Bleys '149 discloses dispersed acrylonitrile particles (see column 3, lines 47-51) and forming a foam (see column 4, line 10), which would suggest a substantially homogenous and spherical shape to an ordinary artisan.

Regarding claims 6-7 and 14-15, a paper substrate would have been obvious to one of ordinary skill in the art because Bleys '149 discloses tampons (see column 1, lines 5-7).

Regarding claims 12 and 16, Bleys '149 discloses mixing with 70 pbw of water (Example 1).

3. The disclosure of "triallyl" is deemed to encompass or at least suggest the claimed "trialkyl" (see above). However, in view of Applicant's interpretation that it does not, the following additional ground of rejection is given:

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Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleys et al. US 6,034,149 in view of Girot et al. US 5,906,734.

Regarding claims 1 and 8, Bleys '149 discloses an absorbent comprising dispersed acrylonitrile (see column 3, lines 47-51) and triallyl methylammonium chloride (see column 5, lines 52-55), mixing with water (see Example 1), and producing a dry foam (see column 7, lines 30-40).

With respect to claims 1 and 8, Bleys fails to disclose that the dispersion is homogenous and "trialkyl".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to disperse homogeneously because an ordinary artisan would maximize the dispersal of the acrylonitrile as disclosed to achieve homogeneity.

Girot '734 discloses "trimethyl" ammonium chloride (see Examples 2 and 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the "trimethyl" of Girot as the "triallyl" group of the methylammonium chloride of Bleys because Bleys discloses "triallyl" methylammonium chloride in a sorbent and Girot discloses the trimethyl ammonium chloride for use in preparation of exchange resins for adsorbent applications (see Examples 2 and 17 and column 12, lines 4-19),

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which would obviously, to one of ordinary skill, suggest trimethyl methylammonium chloride.

Regarding claims 2-4, 9-11, and 17, Bleys '149 discloses triallyl methylammonium chloride crosslinker (see column 5, lines 52-55) and up to 5-10 per 100 parts per weight crosslinker (see column 4, lines 10-28), which would suggest up to 90-95 parts acrylonitrile.

Regarding claims 5 and 13, Bleys '149 discloses dispersed acrylonitrile particles (see column 3, lines 47-51) and forming a foam (see column 4, line 10), which would suggest a substantially homogenous and spherical shape to an ordinary artisan.

Regarding claims 6-7 and 14-15, a paper substrate would have been obvious to one of ordinary skill in the art because Bleys '149 discloses tampons (see column 1, lines 5-7).

Regarding claims 12 and 16, Bleys '149 discloses mixing with 70 pbw of water (Example 1).

Response to Arguments

4. Applicant's arguments filed 7/19/06 have been fully considered but they are not persuasive.

It is argued that Bleys does not teach or suggest the limitation... a polycrylonitrile matrix. This is not persuasive

because Applicant appears to admit that Bleys discloses polymerisation of acrylonitrile (column 3, lines 47-52).

It is argued that Bleys also does not teach or suggest at least one... trialkyl methylammonium compound. This is not persuasive because Applicant appears to admit that triallyl methylammonium is disclosed, which would obviously, to one of ordinary skill, at least encompass or suggest trialkyl methylammonium.

It is argued that the triallyl methylammonium chloride of Bleys... in claim 1. This is not persuasive because Applicant appears to admit that the only potential perceived difference is the presence of double bonds and that both, in any case, contain carbon-carbon single bonds.

It is argued that the Examiner also states that "Applicant appears to admit... invention was made." This is not persuasive because trialkyl methylammonium would be encompassed or suggested by the disclosed triallyl methylammonium for reasons already of record.

It is argued that the Examiner also states that... not recited in the claims. This is not persuasive because Applicant appears to admit that no recitation excluding the presence of double bonds is made in the claim.

It is argued that the cited references also do not provide a motivation to combine to produce the claimed invention. This is not persuasive because the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

It is argued that nothing in Bleys suggest the desirability of... triallyl methylammonium chloide. This is not persuasive because the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

It is argued that furthermore, Applicants respectfully submit that if Bleys... would not function as a crosslinker. This is not persuasive because the same compound is disclosed or suggest and thus would have the same properties. And, in any case, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the

differences would otherwise be obvious. See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

The dependent claims are not allowed for the reasons in the rejection, above.

It is argued that the Examiner relies on Girot as teaching.. preparation of exchange resins. This is not persuasive because Girot is not relied upon alone for a disclosure of trimethyl ammonium chloride. Rather Girot is relied upon for a teaching of trimethyl in place of the disclosed triallyl in Bleys' triallyl methylammonium chloride. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is argued that since Girot does not cure... claims 1 and 8. This is not persuasive for the reasons above.

Conclusion

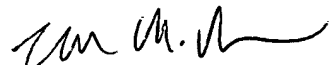
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman

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can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edward M. Johnson
Primary Examiner
Art Unit 1754

EMJ